

CLAIMS

We claim:

1. A method for detecting a positioning signal, comprising:

correlating a segment of a received positioning signal with a reference signal
of a selected code phase and frequency to obtain a correlation value;

if the correlation value is less than a predetermined minimum, assigning the
correlation value to the predetermined minimum; and

accumulating the correlation value in a sum of correlation values obtained
using other segments of the received positioning signal.

2. A method as in Claim 1, further comprising reducing the correlation value by
a predetermined value.

3. A method as in Claim 2, wherein the correlation value is reduced by an
expected mean value for a noise component in the segment of the received positioning
signal.

4. A method as in Claim 1, further comprising quantizing the correlation value.

5. A method as in Claim 4, wherein the predetermined minimum value is the
least quantized correlation value.

6. A method as in Claim 1, further comprising comparing the sum of correlated
values to a predetermined threshold value.

7. A method as in Claim 6, wherein the accumulating is not further carried out
for additional segments of the received positioning signal when the sum of correlated values
exceeds the predetermined value.

8. A method as in Claim 6, further comprising quantizing the correlation value,
and wherein the predetermined threshold value is the greatest quantized value.